

**Gustav Vasa and the Amphora Capitolina
The Ethic of Beer-drinking**

Bernhard Bierschenk¹

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Gustav Vasa and the Amphora Capitolina The Ethic of Beer-drinking

Bernhard Bierschenk¹

Abstract During the reign of Gustav Vasa, many new places were developing into markets and fortresses became castles. In those places flourished beer brewing which provided new conditions for drinking at festivities and in Guilds, which developed out of the *Symbel* tradition. Festivities in the times of Vasa did harbour impressive pomp and abundance of beverages. The customs from numerous medieval festivities, gained during the 15th century, did get additional force through the Renaissance taste for pageantry. The most common activity of the day was gathering at Guilds or central places for drinking large quantities of beer. Impressive beer-drinking in the more formal setting of *Symbel* or Guild implied a penchant to be the worst for the host. The application of [AaO] formula to a *Letter of Gustav Vasa to his Finnish Administrators* has shown that *Disinclination* is emerging as final descriptor for [A] root, which means an instrumental focus on the operator condition. In addition, the final descriptor for the [O] root has emerged as *Disobedience*, which is shifting focus to the response condition. Thus, preciseness in the working of the [AaO] formula implies that its mechanism cannot miss its target, namely to get at the essence of beer-drinking.

A study of Gustav Vasa's governing style implies that a position must be taken on the ethics of drink. In his time, beer was the preferred beverage and when measured with Amphora Capitolina as standard, consumed in very high quantities. Especially Gustav Vasa increased the regulation of beer-drinking which had been pursuit by the brewing guilds. Hence, his goal was not to reduce consumption. Instead, his aim was to ensure the purity of beer brewing in Sweden and also to guarantee the earnings of his subjects as well as high tax revenues.

Since the writing of the beer-drinking regulation, depicted in words, puts the governor into the resulting letter of instructions, it allows the perspectivation of Vasa's position and requires the imaging of the presence of a path of reasoning. This means that a position or standpoint must evolve as the result of the style of writing in order to activate the process of perspectivation. The possibility to trace the patterns of a writing style comes from the observation that the path [A] as well as the path [O] of the [AaO] formula is contributing to the formation of bonds.

Invariant geometric resolutions and the establishment of a coordinate-free A-O-kinematics have made it possible to control the interplay between textual agents and textual objectives within systems of internal and language-specific coordinates. Since the working of the AaO-units is absolute, its bookkeeping procedures can never make any mistake. Errorless working with respect to a processed target condition is the applied definition of preciseness and with respect to a natural language expression the applied definition of completeness. Because the coordinates are intrinsic, they constitute the self-evident foundation for the establishment of invariants.

In continuing with a perspective description of the textual input, the Agent-action-Objective (AaO) paradigm will be applied with the purpose of making apparent to what extent

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a phase-dependent displacement of textual elements can be utilised in the establishment of the underlying structures of intention and orientation. Approaching the text building behaviour of Gustav Vasa this way has shown to manifest the developed structures, however, only under the condition that the textual string in the form of grapheme sequences can be made flowing and transformed into their cyclic displacement patterns. The selected paragraph is adopted from the Runeberg project which has presented a Letter of Gustav Vasa to his Finnish Administrators. The letter is reproduced from Carl Grimberg (2015, pp. 202-203).

»De hava mycket för plägsed allestäds där i Finland att hålla stort krögeri och ölsäljning på kyrkebackarne vid var kyrka om högtidsdagarne, sammalunde uppå någre andre hemmelige platser, utav vilken ölsäljning föga gott avväxer, ändock Vi sådant krögeri och ölsäljning icke en gång utan väl tusende resor, både skriftligen och muntligen, avsagt hava.»

Gustav Vasa appears to be the first Swedish King who wrote a letter on *impressive drinking*. The crucial part of the letter is focussing on the ethics of drink or joints in our social armour (Runciman, 2004). The procedure for analysing the provided letter will now be concentrated on the way in which its originality will reflect differently organised state attractions.

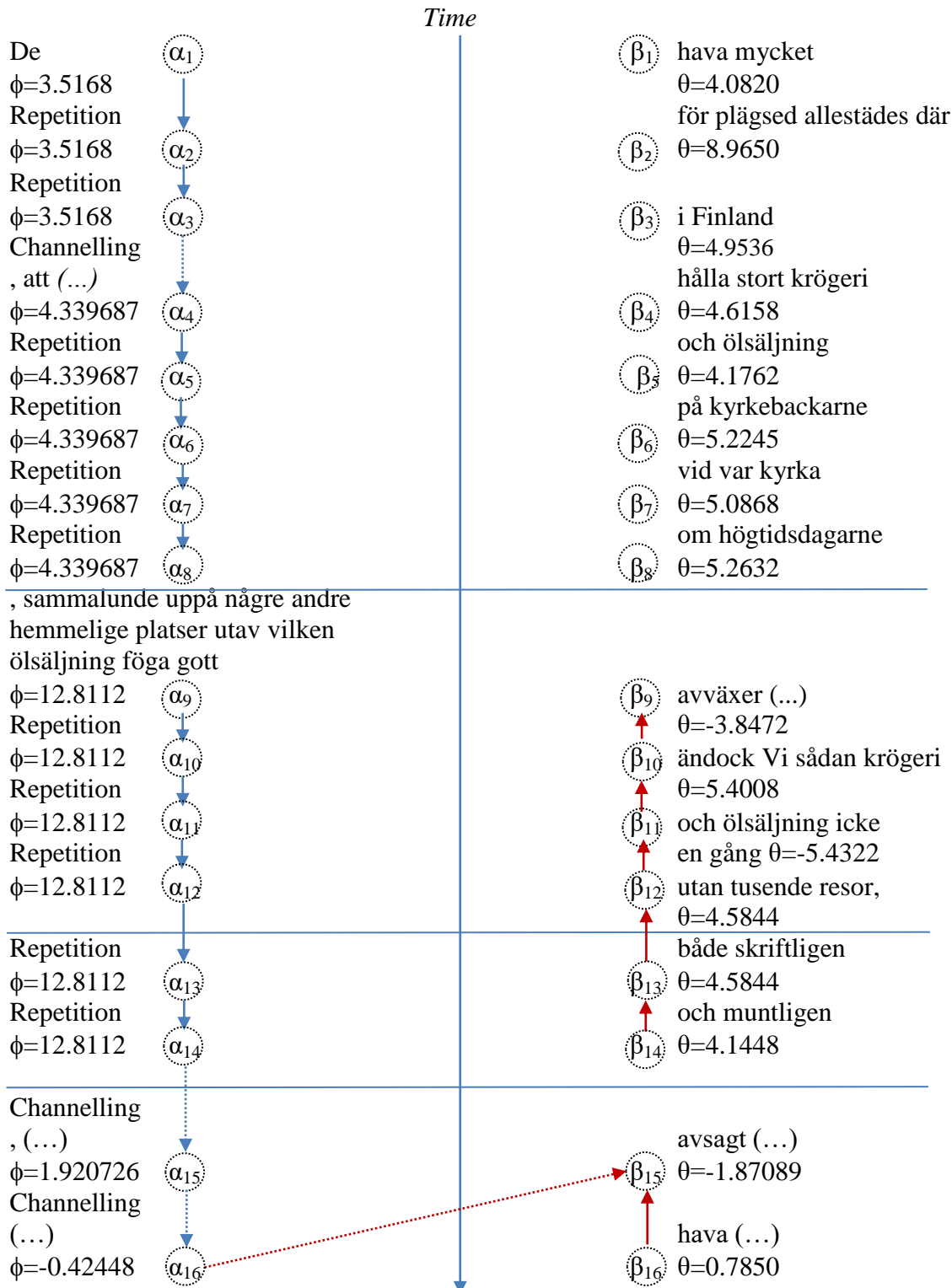
In the first place, variable concentrations are restricted to a strict processing of differences between the created (1) textual agents, i.e. alpha variables and (2) textual objectives, i.e. beta variables. Based on the assumption that stability and change are complementary, a strategy is followed that is producing a configuration, which will make it possible to continue with the identification of local minima as well as local maxima. It is of principle interest to search for developing minima because minima are generating the basic forces, operating in text production. Their detection and specification will lay the ground for an extraction of morphological profiles later on, and thus this will make the description of its structure possible.

Contrasting a cyclic displacement of textual elements with their angular magnitudes allows the evolution of a structure that can be coupled to the manner in which textual elements are accumulated by the [AaO] mechanism. In a conservative assembling of strings of graphemes, each cycle implies the production of a certain redundancy that is an information loss. Writing a letter requires an input of energy and a transformation of the information flowing into the textual system. Thus, its own internal processes structure language as natural communication system. Hence, studying a textual system means studying dynamic textual movement patterns and changes instead of studying frozen text surfaces on the nominal level. Since neither intention nor orientation is fitted into one or the other empirical context, processing must be attuned to the predetermined (internal) order. Thereby, responsive remoulding will allow the resulting state attractions to incorporate both intention and orientation.

Flow Dynamics

As shown in Flow Chart of the Vasa letter, the α -strand is exhibiting a larger increase in distance, which means that it is primarily a function of extensive copying of the α -variable and hence, the redundancy in this component is influencing speed and acceleration in the resulting trajectory. How the intrinsic control parameters are governing a change from one system-state (fixed point) into another (copy of a fixed point) is determining the effect of the rotation. In the mathematical sense, there is no requirement for a subjective choice on the application of order parameters.

Flow Chart: Vasa Letter



The magnitudes, reproduced in Table A2 of the Appendix, show that the rumours on the *Agent-side* are covered under the umbrella and thus focussed on secrets people may have concerning their joints in social armour and their drinking places. How the corresponding spaces are unfolding is specified in Figure 1.

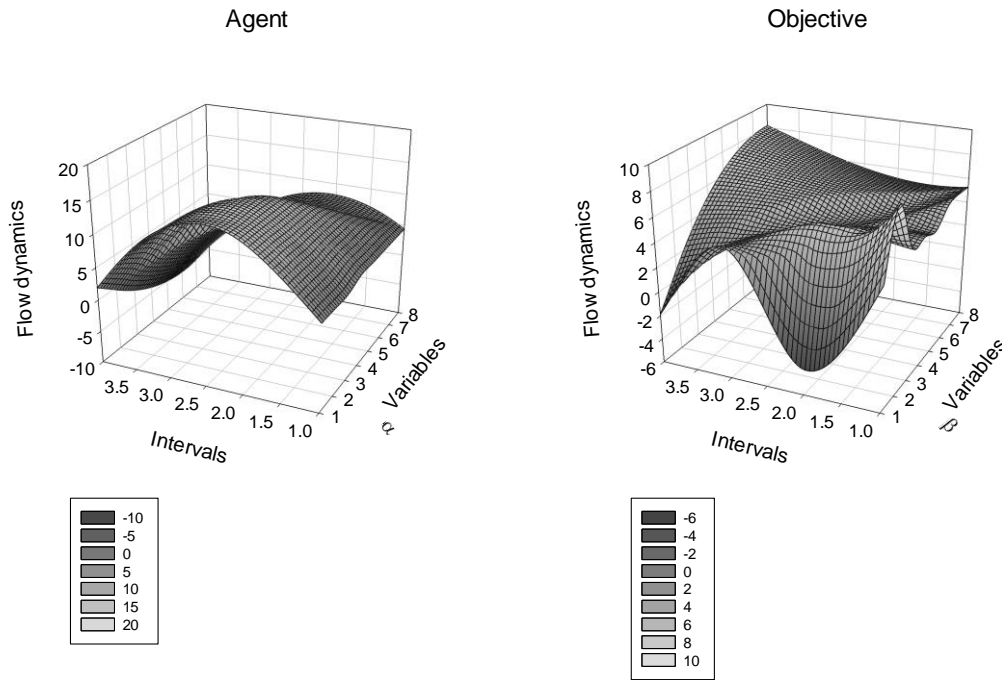


Figure 1 *Articulation in the Unfolded Agent and Objective Spaces*

By starting at the end of the Flow Chart, the path at the left-hand side indicates *Channelling*, marked with (...). It shows that (α_{14}) is channelled into position (α_{16}). Finally, position (α_{16}) provides the basis for its channelling into position (β_{15}). Its disc is indicating that the assessment implies the calculation of a complex q-value of the immediately preceding textual agent among others. The same kind of channelling appears once more, however, now involving (β_{16}), whose value is dependent on a dummy which means an unknown Objective. By computing the roots for both cases means that a transformed value is competing with original expression. In both cases is neither in the A-path nor in the O-path the refraction appearing before the last interval.

The geometric computations of the textual equations have shown that the governing (α) variable is repeated whenever two or more (β) variables appear within the range of the action (verb). Within the conceived set of specifying conditions, repetition implies reusing without alteration of the active agent. Furthermore, the repetition of a grapheme-configuration leaves the winding factor unchanged. Thus, the special character of the notations appears through either a repetition or a channelling. The latter is changing the winding of the active agent.

In contrast, reusing without alteration is addressing the fact that only one root out of eight textual agents has been calculated, and thus the impact of the changing factor in the first interval is minimal. Especially the repetitions in the intervals appear to have shaped a parabolic surface. Thus, when an alteration enters into the process, it is changing the course of the winding path. How the changes have influenced the angular articulation can be comprehended first and foremost through the umbrella-shaped textured surface in the Agent space of Figure 1. The shades in the texture seem to have influenced the involution of rumours and consequently the resulting composites, as well as a temporary induction, related to energy investments.

On the *Objective-side*, the response surface is formed partly by the manifestation of an explicit description of the perceived circumstances, which support drinking partly by a comment on previous measures to prevent drinking. The governing rotation in the Objective is obviously resulting in a stretching operation of the texture at two occasions. Seen over the entire range of the textual movements, such variations are natural since the establishment of a path always is the result of breaking the influence of spatial and temporal order parameters or at least reducing them. Compared to the Agent, the Objective has generated a more complex geometric form, which carries information concerning the minima, i.e., the degree of depth in the textual flow.

As stated previously, information can be studied only to the degree that it has been embodied in evolving text. Conceived in the perspective of evolutionary language dynamics, the achieved measurements have shown that kinetic energy flows can be coupled with the production of kinematic fusion patterns.

Fusion Dynamics

With reference to, the variations becoming manifest in a morphological profile, a first guiding hypothesis may be formulated concerning the evolution of the structure in the Agent (A) and Objective (O) component of the [AaO] model. In what way the AaO-formula constitutes a helpful experimental foundation for the disclosure of the essential text quality will now be discussed with reference to the final or global state attractor of Figure 2.

The previously introduced space-splitting approach (B. Bierschenk, 2001) demonstrates that the open sphere of a text space is controlled by displacement functions, which means that the functions are working in the direction of growing string-vectors. However, with respect to the viscous-elastic properties that have determined the flow dynamics, angular articulation and attitude change provide the context for a fusion of the invested energy. Hence, shearing and straining functions are controlling the resulting A- and O-strands.

In searching for novelties in a particular space, its path description may be conceived of as an evolutionary search tool. Hence, according to Baeyer (1999), for the discovery of the dynamics in a paragraph one must be able (1) to make the producer known through the production, and (2) to recover the underlying intention and orientation through attitudinal changes step-wise and without intervening dissociations and in perfect order.

Orientation Dimension

Since each textual system is building up its own unique development, its behavioural expression is shown to emerge in its workspaces. Besides the capacity to work towards the unification of states, they are converging on the global or final state attraction to be found in the position (X=3, Y=3). In the Vasa context, the final state attraction contains the root of the entire configuration which refers to ***Disinclination***. The subjects of the king are perceived as reluctant or unwilling with regard to his monocratic attempts to regulate socially installed rivalries, for example in the duration of beer-drinking races and festivals.

In particular the *Edict* which appears in the position (X=3, Y=5) has originated from the circumstance that the King did consider private beer brewing and drinking of great quantities as an intrusion. Another definite limiting factor is the number of restraints that the King's rational order has put on the individual. In essence, this means that each of his subjects was personally responsible for not hollowing out the King's revenues. At that time, he privately possessed about 8000 farms!

Besides being an administratively efficient man, the King tried to restrain *Disobedience*, appearing in the position (X=2, Y=5), in order to influence drinking patterns.

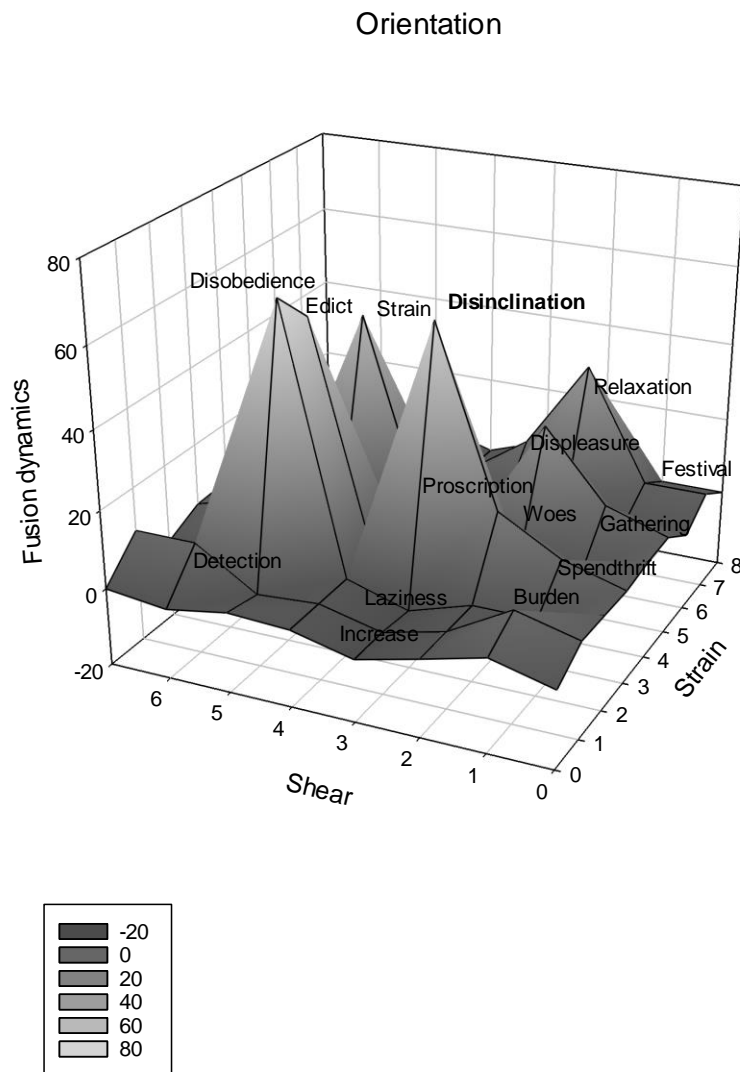


Figure 2 *Orientation towards Beer-drinking Games*

Festivals did contribute to partying as a cornerstone of work experience. Sitting around with colleagues and friends can get pretty boring. With circumstance in mind, drinking games were invented to liven up the experienced leisure time. There are some drinking games that are fairly ubiquitous and some others that aren't as well-known. Some games are old classics, and some are new, but they're all perfect for livening up a Friday night after a week of work.

Disobedience implies that law and regulations that stand in contrast to the customs of performing drinking games are neglected. For example a bowl to the King is the perfect game for group of workers or friends that want to have a good time without remembering a lot of rules. Where most drinking games follow a set of rules, a bowl ('Skål') to the King is extremely conventional and suitable for outdoors festivals (Olaus Magnus, 1500-talsfest, according to Rehnberg, 1963, p. 13).

However, the King's *Edict*, for preventing disorder due to excessive drinking in connection with festivals or religious feasts appears to inflict *Strain* on the people. The concept of *Strain* appears in the position (X=5, Y=5) and refers to stress in relation to certain biosocial limits on human life. It starts from the fact that stressful situations are the result of

preventing people from having fun on common festivals which understandably induces potentially worrying conditions. As a significant variable of human life, the stress function is organising the corresponding processes of submission and adaptation. Seeing oneself and one's society in the light of the King's charges implies an evolutionary multi-step operation that transforms mutually dependent stressors into the comprehension of the boundaries of tradition. This process of parallel causation seems to be deeply rooted in biology.

Intimately connected with the 'general adaption syndrome', Bertók (1998, p. 1) makes a violation of the dominating societal values highly vulnerable to individual transformations. Violations can produce extremely discrepant societal trends and strange developments. Natural resistance to disorder is very important for directing the policy at the societal macro-level. If various states of public disorder could become attentive and its sources made transparent and accessible, this could greatly improve the quality of life (QL). In addition, QL would be a more important measure compared to specific emotional reactions in the form of banning certain drinking patterns as outlined by James Runciman (2004) in the ethics of drink and other social questions or the joints in our social armour.

After the discussion of the local maxima of Figure 1, the focus in the following is on the local minima, appearing in the forefront of the Figure. In the position (X=2, Y=4) appears the attractor *Laziness*. The King's generalized observation of his subjects has resulted in the judgement of lazy individuals since they are seen to be able to carry out the duties that he has applied to them. The activities to be carried out or ought to be carried out are, however, neglected because of the effort involved, the individuals are disinclined to do so.

In the presence of the attractor *Increase*, the other local minimum can be detected in the position (X=1, Y=4). Referends and Priests have at all times defended the custom to host beer-drinking at church-going of the locals at weekends. Serving beer has always been a means to attract large numbers and succeeding in getting them going to church. To speak with the supreme Reverend Olaus Magnus, Archbishop of Uppsala and Primate of Sweden, concealing

a sacred duty to standing drink of Deity and the prince's honour and then, as in a race struggle in sweat of his face sweep the bottle with one, two or more moves to empty a Capitoline pot. (According to Rehnberg, 1963, p. 13), the Roman measure *Amphora Capitolina* held 26 liters.)

Drinking beer in excess is a great way to add flesh to the body but combined with a sedentary life style will decrease the beer drinker's motivation to exercise. Instead he would carry out the expected activity carelessly or engage in some other, less strenuous or less boring activity. In short, excessive beer-drinking makes the person non-motivated to invest any effort into the expected work.

For the King the concept of *Burden* at (X=1, Y=1) refers to his responsibility and care taking, particularly with respect to his Finish subjects, which appear to require personal sacrifices, often at great cost to the King's household. It is the style of binge drinking that has been popular and that has fostered the consumption of heavy loads of beer as indicated by the Amphora Capitolina. This kind of *Burden* encompasses a physical, emotional, social and financial problem that seems to have been perceived by the King.

Thereby traditional social norms may have been violated and thus may have produced extremely discrepant social trends and strange developments, which easily may result in *Spendthrift*, which has appeared in the position (X=3, Y=1). Historically, the King's concern is with the phenomenon behind the word. Thus, it has derived its meaning from an obsolete sense of the affix 'thrift'. Here the reference is rather to prosperity than to frugality. Since the people during the King's reign have been quite prosperous, compared to later centuries, they

could spend their prosperity. Moreover, the King was worried of the extravagance and recklessness of the spending at this point in time.

As a significant attractor in the position ($X=5$, $Y=1$) appears *Gathering* at the church fold as proper indicator of the 15th century Zeitgeist. For a lot of people, church time is a sobering time. However, for many, it has been the best time to empty a pot of beer. Going to church services are meant to offer salvation and everlasting life with a really good beer. Drinking beer at the fold of a church was conceived as a creative approach which worked in the attraction of a fairly number of churchgoers.

The interested observer may be met with a statement about the Nordic peoples practice in drinking beer at *Festivals*. This attractor has appeared in the position ($X=7$, $Y=1$). First and foremost, the attractor marks the sacred duty of the participating guests to empty a Capitoline mug in one, two or three drags. Drinking in standing position is done to the glory of the God and the King. Those drinkers, who are not happy with such rituals, may also compete by showing their sobriety in the form of winning various beer games.

Furthermore, intimately connected with beer-drinking of the people is the King's concern with *Woes* which appears in the position ($X=3$, $Y=2$) implying the perceived violation of the Kings thriftiness. During his control of the country, the availability of food was good for those who worked in his service. Preserved data show a daily calorie intake of 4000 calories (Source: Komvux Gotland, 2017). By comparison, NHS gives the following data: Within a healthy, balanced diet, a man needs around 10,500kJ (2,500kcal) a day to maintain his weight. For a woman, that figure is around 8,400kJ (2,000kcal) a day. Despite the King's eagerness to impose thriftiness, the nutrition standard did not recapture the level of the 16th century Swedes. Furthermore, soldiers were nourished with a lot of drinks. The daily allowance was of about two and a half liters of beer. Moreover on Sundays, the allowance was four to five liters.

Despite a general conviction of poverty, the presented facts speak to a very different situation. The consumption in Sweden was at a high level. Backwardness and chronic shortages were absent. These circumstances point towards prudence in the discussion of a socially related ethics, bridging over to the attractor Proscription in the position ($X=7$, $Y=3$) which aims the King's fears and comprehension of disorder due to the rebellion peasants or miners. On the whole, the King did treat all goods and revenues as his private financial foundation. Therefore, he personally controlled every detail in the administration by his wardens. The exercise of the King's power was particularly applied to the control of beer brewing, selling and drinking.

In the Orientation space appears *Displeasure* in the position ($X=5$, $Y=2$) as a significant attractor in the sense that the King personally battered his subjects at the countryside by written instructions concerning the execution of their work. Moreover, according to Berend von Melen, a commander, and Wulf Gyler, a secretary, he did attack his troops and clerks for the least suspicion of corruption and incompetence. (See also the Crew Conspiracy of 1536). Especially critical comments have been made by the Swedish history writer Vilhelm Moberg, who has argued that Gustav Vasa ruled the Swedish kingdom by Machiavellian Principles.

The attractor *Relaxation* in the position ($X=7$, $Y=2$) marks a condition which is not in the interest of the King since this would mean that people's work obligations become *relaxed*. Since *Relaxation* must be seen in relation to the condition that a lazy subject is without duties which for the King is of a worrying kind. A lot of correspondence with the countrymen points to the King's personal participation in the establishment of an efficient agriculture. His instructions, emerging from his letters to the farmers, alarm the individual and direct the person towards advices on how to manage a farm. Failure to comply with his injunctions could lead to severe fines.

Finally, in the position (X=1, Y=6) has *Detection* become manifested as another local minimum. Gustav Vasa was constantly suspicious of all around him. At the same time, he was careful and efficient in writing letters with threats and demands. Everything that could be taxed was detected efficiently by his wardens, who with tricks and pure lies tried to get at people's hidings. Especially the farmers were opposed to the King's kind of sneaking out their hidden beer-drinking places.

Description of the Intention Dimension

Text analysis and description is traditionally concerned with an approach from *outside*. However, when both are expected to deal with processes, the relational dependencies of structure and form has to be approached from *inside*. The focus is thereby shifting towards crucial structural qualities of intention. Without doubt, it can be concluded that the relational processing of the q-measures has to depict state dependencies which are anticipated to emerge in an invariant geometric form and thus in the configuration of Figure 3.

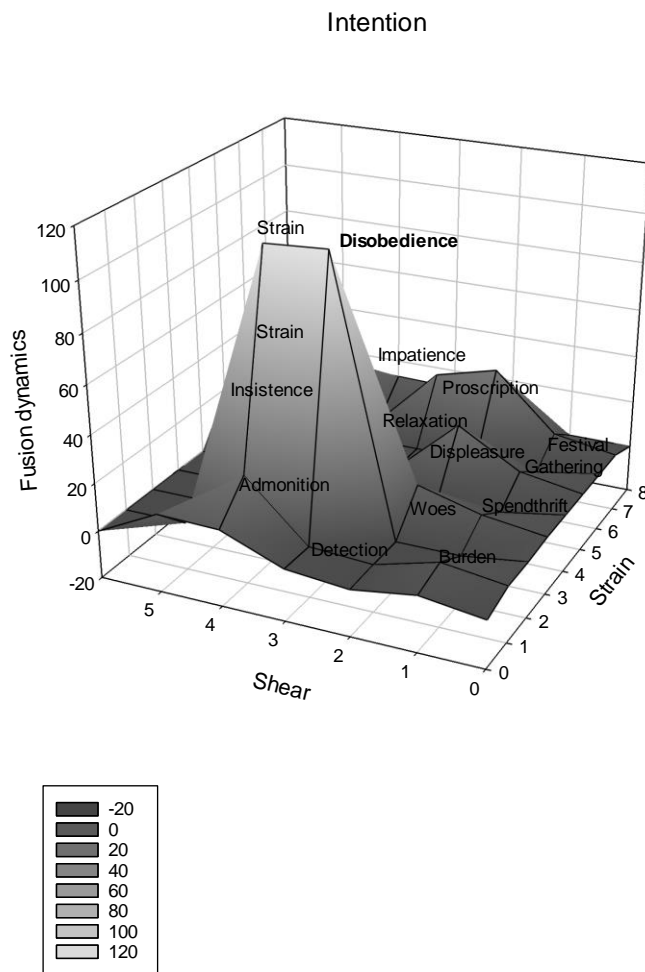


Figure 3 *Intention with Beer-drinking Games*

Cyclic and rhythmic extraction of related information invariants out of the Orientation space is producing different developments in the single trajectories. Thereby it is possible to specify the information value of [A]. The most striking difference in the process concerns the

linkages which are appearing in the A-component. In regarding the cyclic forward and backward moves of the extraction mechanism, it is demonstrable that cyclic processing means directing the swing of the cycle towards the highest point on the curve, i.e., its destination and consequently towards the terminus that constitutes the proper description of the singularity on the Agent path.

Table A5 is summarising the extraction operations for the [A] configuration. Through the cyclic extraction of the descriptors, it becomes evident through the clockwork of extraction that the *looping* phenomenon is highlighting closed cycles in the text producer's style of argumentation. Thus, looping is an intentional phenomenon, which is producing closed loops through which certain descriptors become locked or may reappear within as well as between sub-structures.

For example, the terminus *Strain* is reappearing as state attractor at two different locations namely in the coordinates (X=5, Y=5) and (X=2, Y=4). The concept is directed towards a heavy load, experienced by the need for making people fit in order to maximize their enactments so that time, energy and effort are not wasted. Although identical in naming, reproducing a terminus a second time is pronouncing the policy issue of *Proscription* at (X=8, Y=3).

The public may well be aware of the consequences of *Disobedience*. This descriptor appears at (X=2, Y=3) and is accounting for peoples' action when engaged in refusal or failure to obey the rules of the King on beer-drinking. Therefore, the people appear to be willing to accept the legal measures following conscientious refusal.

A particular characteristic of the King is his *Impatience* at (X=8, Y=5). This trait has led him appear to feel and show hostility towards his people, especially toward those who obstruct, frustrate or delay his goals. As already indicated, the King was described as a foolish villain who was constantly ready to *Detection* (X=1, Y=3) of threats and to bump into the back of his old followers. This at least was the opinion of Berend von Melen who was a legion leader and who fled from Sweden in 1525. As mentioned previously, another critic was Wulf Gyler, a secretary, who was forced to flee from the country, like Olaus Magnus, Archbishop of Uppsala and Primate of Sweden. Both were forced out in order to save their life. Especially, the secretary has characterized him as a bloodthirsty and vengeful tyrant who regularly let the lion-opposition oppressors personally blame their combatants and imprinters for the least suspicions of corruption and incompetence.

On the other hand, the King's practical outlook and his vision of the need for a fundamental re-formation of Swedish life appear to manifest itself at (X=6, Y=5) in the King's *Insistence* and his institution of new impartial principles for the legislation of abstinence. His degree of *Insistence* will depend on the control achieved over people's arrangements for festivals. Thus, monocratic limitations impose a definite *Strain* (X=2, Y=4) on the participating individuals and would allow only a certain number of parties.

Basically, *Admonition* at (X=1, Y=4) refers to the tumultuous years of the King's religious reformers who consistently stood up to his ruling power and fighting for an identity built on the Bible and an identity, meaningful to the world. According to the King's own propaganda, he told the people to hold on his throne and support him in economic as well as in his political ambitions. Thereby he made use of traditional values and Luther's Bible in order to establish a strong government and a better-organized state.

Trying to prevent *Relaxation* which appears at (X=7, Y=2) by *Insistence* on ceasing the drinking of beer and by refraining *Gathering* at (X=5, Y=1) and *Festival* at (X=7, Y=1) means foreseeing *Woes* which appear at (X=3, Y=2). These are to a certain degree intentional and as such within the scope of his intentional *Insistence*. So, *Burden* at (X=1, Y=1) in its neighbourhood is based on purely subjective measures, i.e. a belief of what would happen to the economy of the King and to the mind of the people.

The intentionally expressed *Displeasure* at (X=5, Y=2) refers to the emotions elicited by committed faults. When people are violating important values, irritation appears to increase and anger may become directed towards the *Spendthrift*, expressed at (X=3, Y=1) as a result of his disloyal people. As a powerful emotional action, it can easily lead to aggressive and even violent behaviour on behalf of the King, especially when it comes to the relation between the feasting of the people and their beer consumption.

Discussion

In Sweden, King Gustav Vasa (1496-1560) is considered the founder of modern Sweden and the one who set up a Royal Brewery with the goal to produce beer in the Hamburg style. But he also limited drinking by proscription (e.g. Letter of Gustav Vasa to his Finish Administrators). The purpose with the King's imperative was to focus the attention of his administrators on the beer-drinking condition of his time. Other examples from the Vasa era illustrate that rivalry in lavish hospitality has inspired Gustav Vasa to prohibit the more expensive forms of festivities. Therefore, the King issued regulations with the purpose to curtail the worst beer-drinking excesses. Over the time to come, the success of the King's instruction to his chiefs did dependent on the power of his household as well as the single individual's willingness to submit to the ambition for social development so that something like a civilization process would become a reality.

Despite the King's restrictions of the number of distribution spots, the single citizen did not act or try to submit to the required re-actions. Both beer consumption and civilization continued to grow. Hopped beer brewing and drinking expanded mainly on the grounds of population increase. It was not only civilization, conceived as conditioned society that played an important role in the making a citizen out of the King's subjects, but the modus (or timing) of the individual's re-action were likewise of import. Understanding the proscribed conditions did influence the citizen's judgement and decision making concerning his drinking pattern. Somehow this situation became reflected at those occasions where subjectivity hampered certainty in the expected behavioural outcome.

For example, *Disobedience* emerged as the core of the Intention dimension and played as a factor of operand conditioning its part in an atmosphere where the Regime tried to influence the individual's beer-drinking as well as the citizens' festivities in general. Thus, a dynamic Regime must strive towards proper habituation. On the other hand, *Disinclination* appeared as a factor of response conditioning in the Orientation dimension. The focus of the latter has been shown to be on the achievement of effects concerning the individual's attitude towards beer-drinking and merrymaking.

Furthermore, the ideas of significance for this kind of an operand conditioning may be related to the political thoughts produced by English humanists and published in books on utopic civilizations (e.g. Thomas More, in 1516). In keeping with this outlook any deviation from the given instructions was seen by the King as a path right into disorder. Therefore, response conditioning inevitably is reflecting the need for the restraint of *Disobedience* by law in order to perform specific functions and to prevent laziness and fabulous desires. With this positioning in the political ideas of the time, it would mean the enforcement of obedience and the use of forces in punishing wrongdoers.

At that time, thoughts on behaviour mechanics essentially meant a machine-like regulation of a subject's behaviour and to provide him with law and authority. Therefore, striving for strict behavioural controls and obedience meant to recognize the King's right to issue regulations. In contrast to the middle Ages, this is a modern conception which implies that regulations, based on law are positive and man-made and not divine. In contrast, the middle Ages viewed laws as divine and thus, as something already existing. By returning to

Disobedience as the core of intention, the basic idea behind the King's eagerness to write personal letters is his request for prosperity of the state. Since the strength of his Regime did depend on it, the plain factor in the production of wealth is labour, and idleness is a curse.

Within the range of Gustav Vasa's authority the Swedish people were turned towards the autocratic alliance with the ideas of the Reformation. Instead of individual responsibility and growth like in the beginning of 'Middle Ages', the intention was to utilise conditioning with the purpose to transform the Swedish people into citizens by overseeing their way of organising drinking parties and feasts. The expected, i.e. the conditioned response is a consensus regarding the role of the superior vis-à-vis the individuals, belonging to different groups or communities. Since the times of Gustav Vasa, the behaviouristic method of conditioning appears to be deeply entwined with the modern functioning of the Swedish society.

As a result it becomes clear that the King's ambition was to shape a rational Swedish state. From the synthesizing outline of the results of the Vasa era, the discussion had to take place against the background of the King's ambition to shape a *Swedish Nation*, i.e., totality in the form of a national state. Furthermore, in the absence of a demonstrative definition of *civilization growth*, it is impossible to reveal what kind of rational abilities should be searched for and demonstrated in order to describe people in their more or less successful functioning as citizens.

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Appendix

Tables

Table A1 *AaO Coding and Computation of Radians*

Table A2 *Intervals and Radians of Alpha and Beta Variables*

Table A3 *Transformation of Beta Variables*

Table A4 *Transformation of the Alpha Variables*

Table A5 *Extraction of Termini from the O-mesh*

Table A1

AaO Coding and Computation of Radians

<i>Code</i>	<i>String</i>	<i>Count</i>	<i>Interval</i>	<i>Calculation</i>	<i>Base</i>	<i>Sum</i>
30	De	2		0.3768	3.14	3.5168
40	hava	4		0.4396		
50	mycket	6		0.5024		
				0.942	3.14	4.0820
80	för	3		0.715		
80	plägsed	7		0.935		
80	allestädes	10		1.1		
80	där	3		0.715		
				3.465	5.5	8.965
60	i	1		0.4257		
60	Finland	7		0.6579		
				1.0836	3.87	4.9536
0,1	att	3		0.715		
30	*			5.5		
				6.215		4.339687
40	hålla	5		0.471		
50	stort	5		0.471		
50	krögeri	7		0.5338		
				1.4758	3.14	4.6158
0,1	och	3		0.4082		
50	ölsäljning	10		0.628		
				1.0362	3.14	4.1762
60	på	2		0.4644		

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	kyrkebackarne	13		0.8901		
				1.3545	3.87	5.2245
	vid	3		0.5031		
	var	3		0.5031		
	kyrka	5		0.5805		
				1.5867	3.87	5.4567
60	om	2		0.4644		
	högtidsdagarne	14		0.9288		
				1.3932	3.87	5.2632
0.1	,	1	2	0.5181		
30	sammalunde	10		0.942		
30(60)	uppå	4		0.6594		
	någre	4		0.6594		
	andre	4		0.6594		
	hemmelige	9		0.8949		
60	utav	4		0.7536		
	vilken	6		0.7536		
	ölsäljning	10		0.942		
	föga	4		0.6594		
	gott	4		0.6594		
				8.1012	4.71	12.8112
40	avväxer	7		1.0676		
50	*			6.28		
				7.3476		-3.8472
	,	1		0.3454		
	ändock	6		0.5024		
	Vi	2		0.3768		
	sådant	6		0.5024		
	krögeri	7		0.5338		
				2.2608	3.14	5.4008
0,1	och	3		0.4082		
	ölsäljning	10		0.628		
	icke	4		0.4396		
	en	2		0.3768		
	gång	4		0.4396		
				2.2922	3.14	5.4322
0,1	utan	4		0.4396		
	tusende	7		0.5338		
	resor	5		0.471		

			1.4444	3.14	4.5844
0,1	,	1	0.3454		
	både	4	0.4396		
	skriftligen	11	0.6594		
			1.4444	3.14	4.5844
0,1	och	3	0.4082		
	muntligen	9	0.5966		
			1.0048	3.14	4.1448
	,	1	3		
30	*			5.5	1.920726
40	avsagt	6	1.0048		
50			6.28		
			7.2848		-1.87089
0,1	*		4		
30	*			5.5	-0.42448
40	hava	4	0.4396		
50			0		
	.	1	0.3454		
			0.785		0.7850

Table A2*Intervals and Radians of Agent and Objective Variables*

Case	Interval	Agent	Objective
1	1	3.5168	4.0820
2	1	3.5168	8.9650
3	1	3.5168	4.9536
4	1	4.33968	4.6158
5	1	4.33968	4.1762
6	1	4.33968	5.2245
7	1	4.33968	5.4566
8	1	4.33968	5.2632
1	2	12.8112	-3.8472
2	2	12.8112	5.4008
3	2	12.8112	5.4322
4	2	12.8112	4.5843
1	3	12.8112	4.5843
2	3	12.8112	4.1448
1	4	1.9207	-1.8708
2	4	-0.4244	0.7850

Table A3
Transformation of Beta Variables

<i>X</i>	<i>Y</i>	<i>Node</i>	<i>Value</i>	<i>Transformation</i>	<i>English</i>
0	0	0	0		
0	1	1	4.0820	hava mycket	have much
1	0	3	4.9536	i Finland	in Finland
1	1	T₁	9.0356	Påfrestning	Burden
2	0	4	4.6158	hålla stort krögeri	beer-trading
3	0	5	4.1762	och ölsäljning	sales
3	1	T₂	8.7920	Slösery	Spendthrift
<i>1</i>	<i>1</i>	<i>T₁</i>	<i>9.0356</i>	<i>Påfrestning</i>	<i>Burden</i>
<i>3</i>	<i>1</i>	<i>T₂</i>	<i>8.7920</i>	<i>Slösery</i>	<i>Spendthrift</i>
3	2	T₃	17.8276	Elände	Woes
4	0	6	5.2245	På kyrkeback	on the church hill
5	0	7	5.4567	Vid var kyrka	at each church
5	1	T₄	10.6812	Sammankomst	Gathering
<i>3</i>	<i>2</i>	<i>T₃</i>	<i>17.8276</i>	<i>Elände</i>	<i>Woes</i>
<i>5</i>	<i>1</i>	<i>T₄</i>	<i>10.6812</i>	<i>Sammankomst</i>	<i>Gathering</i>
5	2	T₅	28.5088	Misbehag	Displeasure
6	0	D	0		
7	0	8	5.2632	Om högtidsdagarne	at anniversaries
7	1	T₆	5.2632	Festlighet	Festival
<i>5</i>	<i>2</i>	<i>T₅</i>	<i>28.5088</i>	<i>Misbehag</i>	<i>Displeasure</i>
<i>7</i>	<i>1</i>	<i>T₆</i>	<i>5.2632</i>	<i>Festlighet</i>	<i>Festival</i>
7	2	T₇	33.7720	Avkoppling	Relaxation
8	2	10	5.4008	ändock Vi sådan krögeri	nevertheless We such intemperance
8	3	11	5.4322	och ölsäljning icke en gång	and öl sales not once
7	3	T₈	10.8330	Proskription	Proscription
8	4	D	0		
8	5	12	4.5843	Utan tusende resor	without thousandth trips
7	5	T₉	4.5843	Otålighet	Impatience
<i>7</i>	<i>3</i>	<i>T₈</i>	<i>10.8330</i>	<i>Proskription</i>	<i>Proscription</i>
<i>7</i>	<i>5</i>	<i>T₉</i>	<i>4.5843</i>	<i>Otålighet</i>	<i>Impatience</i>
6	5	T₁₀	15.4173	Insisterande	Insistence
<i>7</i>	<i>2</i>	<i>T₇</i>	<i>33.7720</i>	<i>Avkoppling</i>	<i>Relaxation</i>
<i>6</i>	<i>5</i>	<i>T₁₀</i>	<i>15.4173</i>	<i>Insisterande</i>	<i>Insistence</i>
5	5	T₁₁	49.1893	Belastning	Strain
8	4	13	4.5843	både skriftligen	both in writing
8	3	14	4.1448	och muntligen	and orally
7	3	T₁₂	8.7291	Förmaning	Admonition
<i>5</i>	<i>5</i>	<i>T₁₁</i>	<i>49.1893</i>	<i>Belastning</i>	<i>Strain</i>
<i>7</i>	<i>3</i>	<i>T₁₂</i>	<i>8.7291</i>	<i>Förmaning</i>	<i>Admonition</i>
3	5	T₁₃	57.9184	Påbud	Edict
6	7	D	0		

5	7	2	8.9650	för plägsed allestädes där	custom everywhere
5	6	T₁₄	8.9650	Sedvänja	Habit
3	5	T ₁₃	57.9184	Påbud	Edict
5	6	T ₁₄	8.9650	Sedvänja	Habit
2	4	T₁₅	66.8834	Olydnad	Disobedience
0	6	15	-1.8708	avsagt (...)	renounced (...)
0	5	16	0.7850	hava (...)	will (...)
1	5	T₁₆	-1.0858	Ertappande	Detection
0	4	D	0		
0	3	9	-3.8472	avväxer (...)	grow
1	3	T₁₇	-3.8472	Tilltagande	Increase
1	5	T ₁₆	-1.0858	Ertappande	Detection
1	3	T ₁₇	-3.8472	Tilltagande	Increase
2	3	T₁₈	-4.9330	Lättja	Laziness
2	4	T ₁₅	66.8834	Olydnad	Disobedience
2	3	T ₁₈	-4.9330	Lättja	Laziness
3	3	T₁₉	61.9504	Obenägenhet	Disinclination

Table A4*Transformation of the Alpha Variables*

Var	Rad	Var	Rad	Var	Rad
1	3.5168	7	4.3397	T7	32.2488
2	3.5168	8	4.3397	T10	51.2448
T1	7.0366	T6	8.6794	T11	83.4936
3	3.5168	T5	23.5694	13	12.8112
4	4.3397	T6	8.6794	14	12.8112
T2	7.8565	T7	32.2488	T12	25.6224
T1	7.0366	9	12.8112	T11	83.4936
T2	7.8565	10	12.8112	T12	25.6224
T3	14.8901	T8	25.6224	T13	109.1160
5	4.3397	11	12.8112	15	1.9207
6	4.3397	12	12.8112	16	-0.4244
T4	8.6794	T9	25.6224	T14	1.4963
T3	14.8901	T8	25.6224	T13	109.1160
T4	8.6794	T9	25.6224	T14	1.4963
T5	23.5694	T10	51.2448	T15	110.6123

Table A5

Extraction of Termini from the O-mesh

X	Y	A-component Pendulum	O-component Destination	English Extraction	Fusion Value (q)
1	1	$T_1: 1 \rightarrow 2$	T_{O8}	Burden	7.0336
3	1	$T_2: 3 \rightarrow 4$	T_{O2}	Spendthrift	7.8565
3	2	$T_3: T_{A2} \rightarrow T_{A1}$	T_{O3}	Woes	14.8901
5	1	$T_4: 5 \rightarrow 6$	T_{O4}	Gathering	8.6794
5	2	$T_5: T_{A4} \rightarrow T_{A3}$	T_{O5}	Displeasure	23.5695
7	1	$T_6: 7 \rightarrow 8$	T_{O6}	Festival	8.6794
7	2	$T_7: T_{A6} \rightarrow T_{A5}$	T_{O7}	Relaxation	32.2489
8	3	$T_8: 9 \rightarrow 10$	T_{O12}	Proscription	25.6224
8	5	$T_9: 11 \rightarrow 12$	T_{O13}	Impatience	25.6224
6	5	$T_{10}: T_{A9} \rightarrow T_{A8}$	T_{O10}	Insistence	51.2448
5	5	$T_{11}: T_{A10} \rightarrow T_{A7}$	T_{O11}	Strain	83.4936
1	4	$T_{12}: 13 \rightarrow 14$	T_{O13}	Admonition	25.6224
2	4	$T_{13}: T_{A12} \rightarrow T_{A11}$	T_{O15}	Strain	109.1160
1	3	$T_{14}: 15 \rightarrow 16$	T_{O16}	Detection	1.4963
2	3	$T_{15}: T_{A14} \rightarrow T_{A13}$	T_{O15}	Disobedience	110.6123